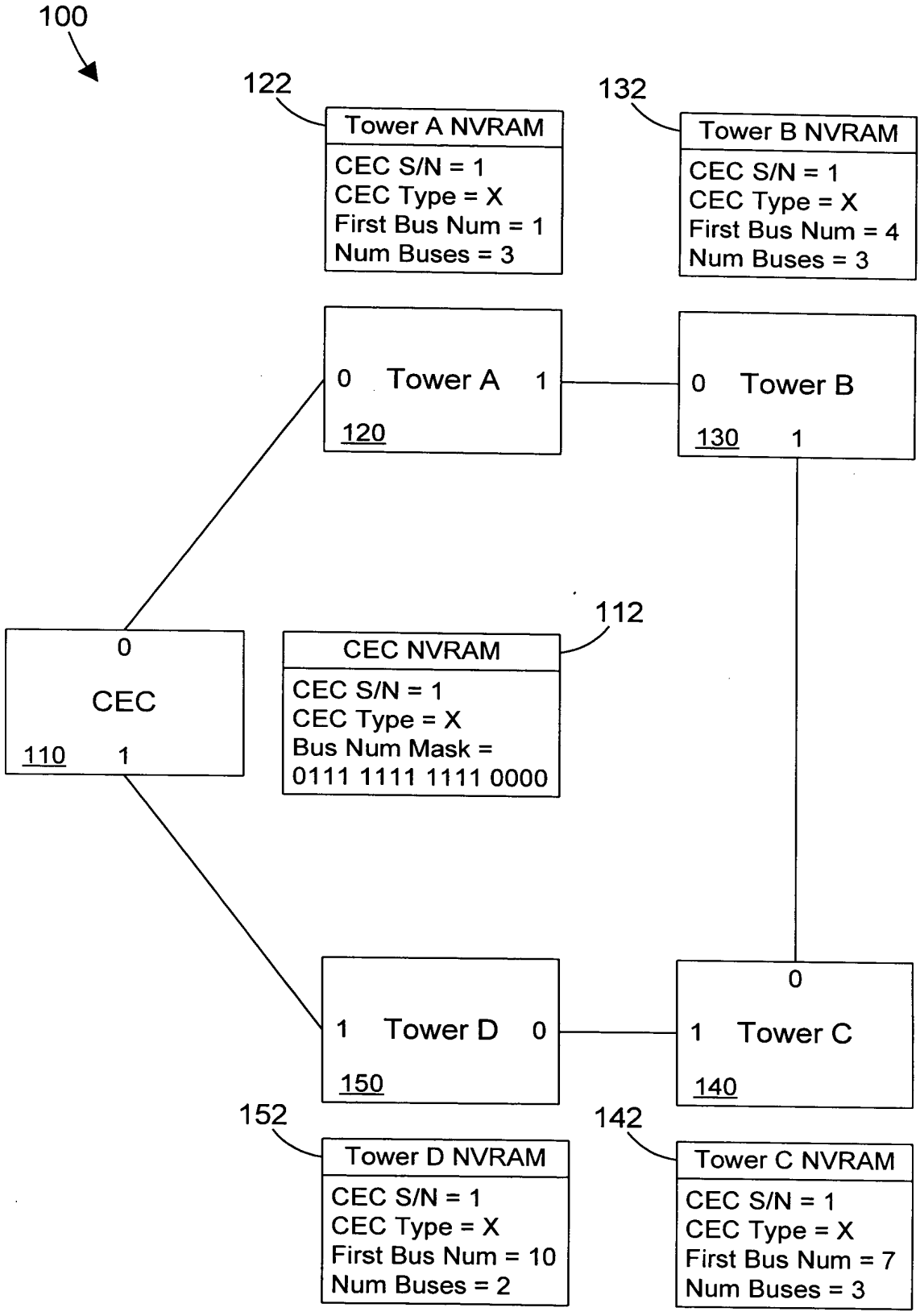

FIG. 1 Prior Art

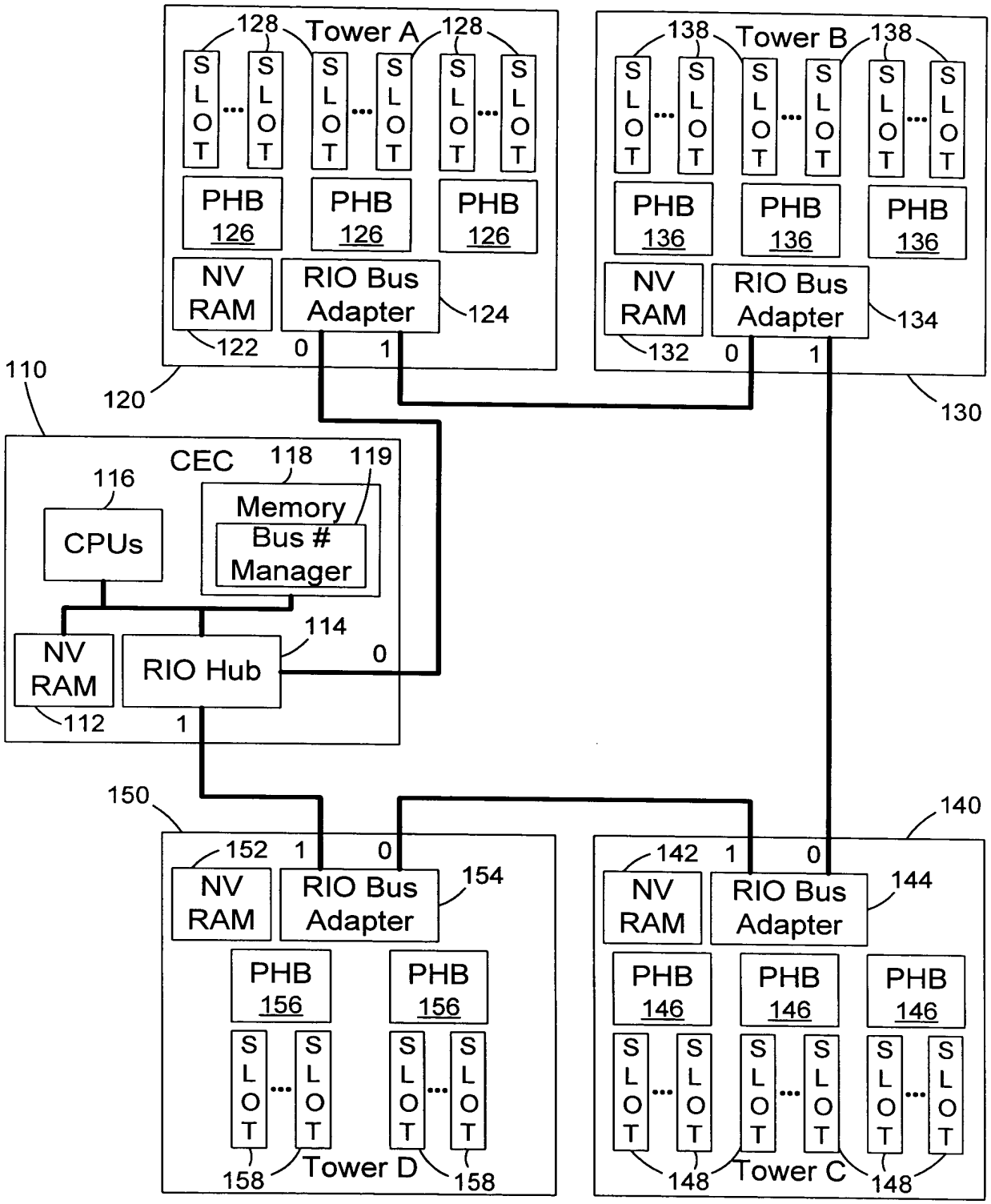

FIG. 2 Prior Art

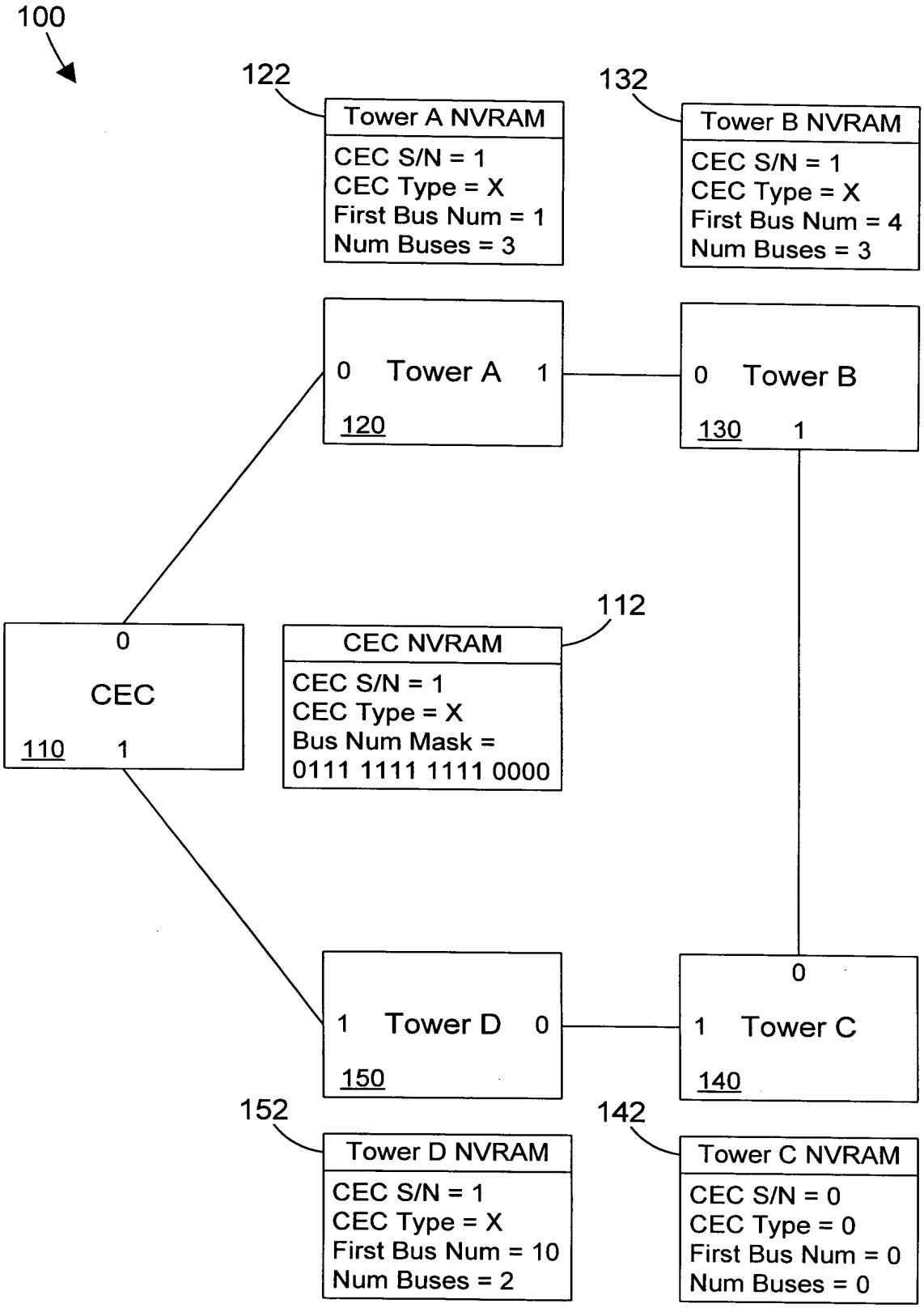

FIG. 3 Prior Art

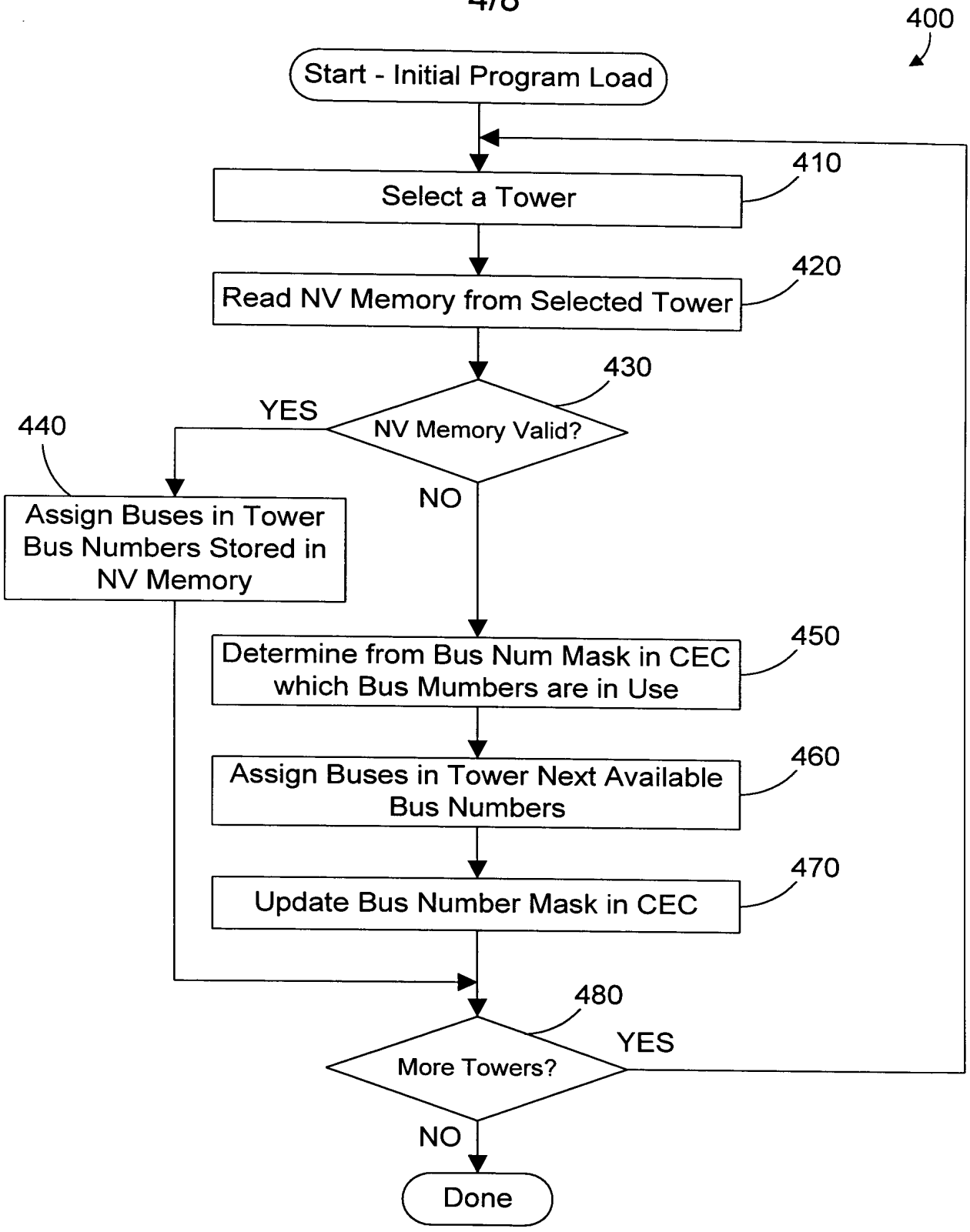

FIG. 4 Prior Art

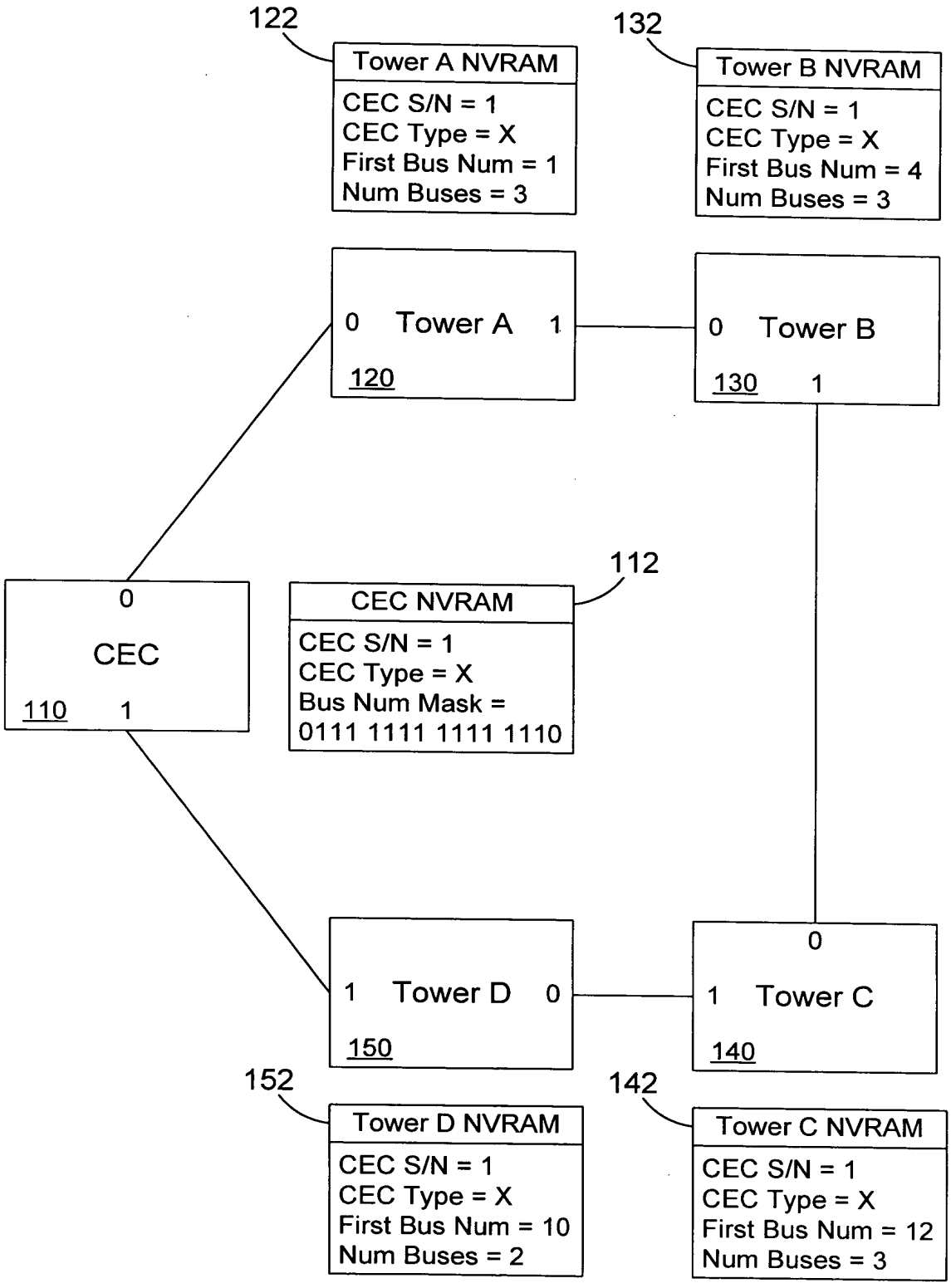

FIG. 5 Prior Art

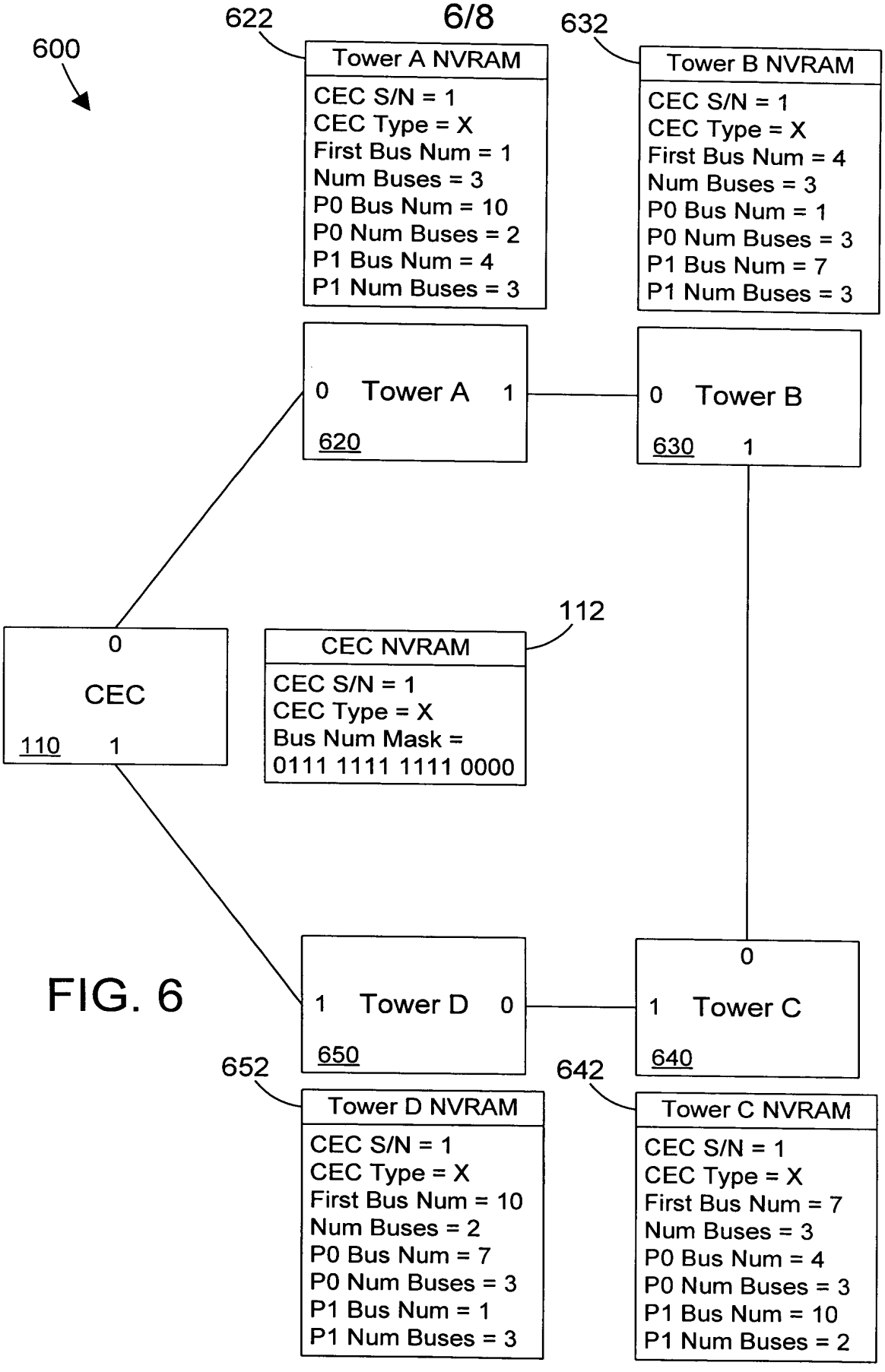
600
622
Tower A NVRAM
CEC S/N = 1
CEC Type = X
First Bus Num = 1
Num Buses = 3
P0 Bus Num = 10
P0 Num Buses = 2
P1 Bus Num = 4
P1 Num Buses = 3
632
Tower B NVRAM
CEC S/N = 1
CEC Type = X
First Bus Num = 4
Num Buses = 3
P0 Bus Num = 1
P0 Num Buses = 3
P1 Bus Num = 7
P1 Num Buses = 3
0 Tower A 1
620
0 Tower B
630 1
112
0
CEC
110 1
CEC NVRAM
CEC S/N = 1
CEC Type = X
Bus Num Mask =
0111 1111 1111 0000
1 Tower D 0
650
0
1 Tower C
640
652
Tower D NVRAM
CEC S/N = 1
CEC Type = X
First Bus Num = 10
Num Buses = 2
P0 Bus Num = 7
P0 Num Buses = 3
P1 Bus Num = 1
P1 Num Buses = 3
642
Tower C NVRAM
CEC S/N = 1
CEC Type = X
First Bus Num = 7
Num Buses = 3
P0 Bus Num = 4
P0 Num Buses = 3
P1 Bus Num = 10
P1 Num Buses = 2

FIG. 6

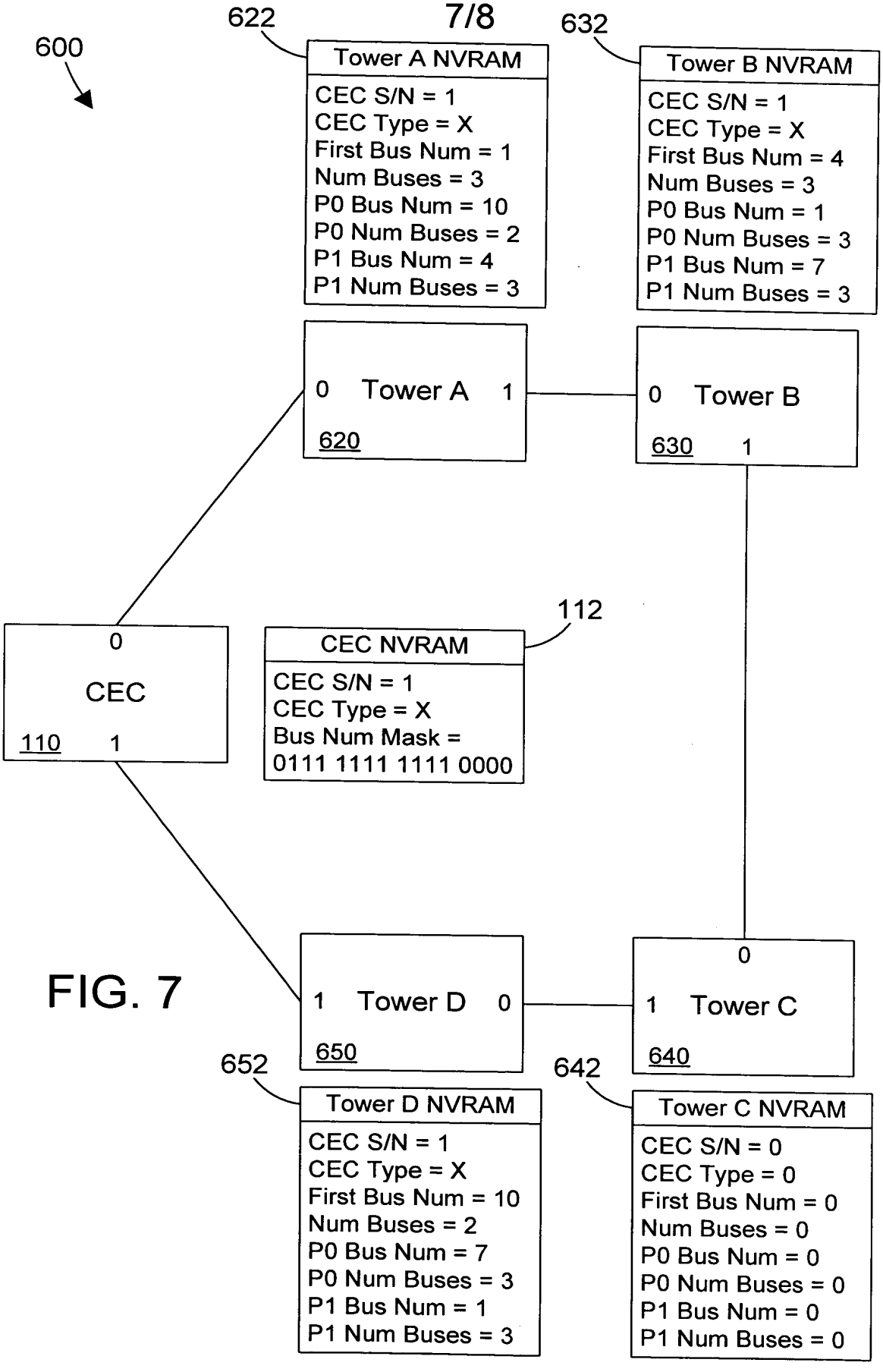
600
622
Tower A NVRAM
CEC S/N = 1
CEC Type = X
First Bus Num = 1
Num Buses = 3
P0 Bus Num = 10
P0 Num Buses = 2
P1 Bus Num = 4
P1 Num Buses = 3
632
Tower B NVRAM
CEC S/N = 1
CEC Type = X
First Bus Num = 4
Num Buses = 3
P0 Bus Num = 1
P0 Num Buses = 3
P1 Bus Num = 7
P1 Num Buses = 3
0 Tower A 1
620
0 Tower B
630 1
0
CEC
110 1
112
CEC NVRAM
CEC S/N = 1
CEC Type = X
Bus Num Mask =
0111 1111 1111 0000
1 Tower D 0
650
0
1 Tower C
640
652
Tower D NVRAM
CEC S/N = 1
CEC Type = X
First Bus Num = 10
Num Buses = 2
P0 Bus Num = 7
P0 Num Buses = 3
P1 Bus Num = 1
P1 Num Buses = 3
642
Tower C NVRAM
CEC S/N = 0
CEC Type = 0
First Bus Num = 0
Num Buses = 0
P0 Bus Num = 0
P0 Num Buses = 0
P1 Bus Num = 0
P1 Num Buses = 0

FIG. 7

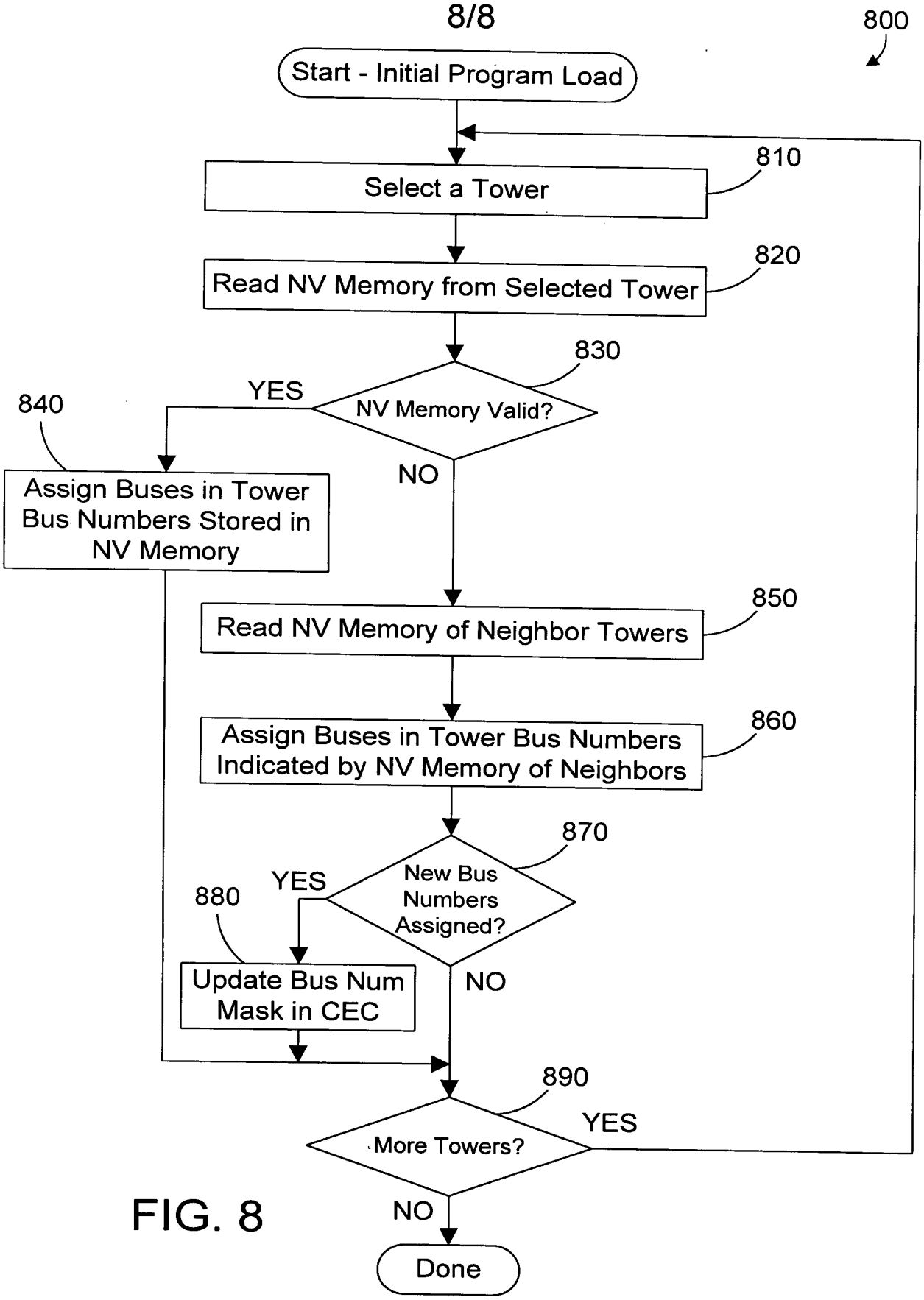
800
Start - Initial Program Load
810
Select a Tower
820
Read NV Memory from Selected Tower
830
NV Memory Valid?
YES
NO
840
Assign Buses in Tower Bus Numbers Stored in NV Memory
850
Read NV Memory of Neighbor Towers
860
Assign Buses in Tower Bus Numbers Indicated by NV Memory of Neighbors
870
New Bus Numbers Assigned?
YES
NO
880
Update Bus Num Mask in CEC
890
More Towers?
YES
NO
Done

FIG. 8